## SUPPLEMENTAL MATERIALS AND METHODS

**Cytotoxicity assays**. Cytotoxicity caused by individual shRNA-containing lentivirus was measured by CellTiter-Glo Luminescent Cell Viability Assay kit (Promega) according to the manufacturer's instruction. Increasing amounts of lentivirus were added into independent wells seeded with 10<sup>4</sup> HeLa cells in opaque-walled 96-well plates. At forty-eight hours post transduction, cells lysates were prepared using CellTiter-Glo Reagent and luminescence was measured by TriStar LB 941 Multimode Microplate Reader (Berthold Technologies).